

**MARICOPA COUNTY AIR QUALITY DEPARTMENT**

**Permitting Division**

**1001 N. Central Avenue, Suite 125, Phoenix, Arizona 85004**

**Phone: (602) 506-6010**

**Fax: (602) 506-6985**

**GENERAL PERMIT TO OPERATE AND/OR CONSTRUCT**

*As required by Title 49, Chapter 3, Article 2, Section 49 – 480, Arizona Revised Statutes  
and Maricopa County Air Pollution Control Regulations*

**for**

**FACILITIES OPERATING STATIONARY EMERGENCY  
INTERNAL COMBUSTION ENGINES**

*This general permit to operate and/or construct does not relieve the applicant of the responsibility  
of meeting all air pollution regulations.*

**EXPIRATION DATE:** 4-10-2016

**REVISION DATE:** 4-11-2012

**ISSUANCE DATE:** 4-11-2011

---

**William D. Wiley, Director, Maricopa County Air Quality Department**

**General Permit to Operate and/or Construct a Facility Operating  
Stationary Emergency Internal Combustion Engines (ICE)**

**Table of Contents**

<b>SECTION 1</b>	<b>Authority.....</b>	<b>Page 1</b>
<b>SECTION 2</b>	<b>Definitions.....</b>	<b>Page 1</b>
<b>SECTION 3</b>	<b>Authorization Under this General Permit.....</b>	<b>Page 3</b>
	A. Authority to Operate (ATO) or Construct.....	Page 3
	B. Effective Date and Expiration Date of Authorization .....	Page 3
	C. Filing of an Application for an ATO.....	Page 4
	D. Requirements to File for an Individual Source Permit .....	Page 4
	E. Issuance of an Individual Source Permit.....	Page 4
<b>SECTION 4</b>	<b>General Requirements .....</b>	<b>Page 4</b>
	A. Compliance Required .....	Page 4
	B. Facility Changes Not Requiring a Permit Revision .....	Page 4
	C. Pay Applicable Fees .....	Page 6
	D. Posting of a Permit.....	Page 6
	E. Property Rights .....	Page 6
	F. Right to Entry and Inspection.....	Page 6
	G. Severability .....	Page 6
<b>SECTION 5</b>	<b>General Operating Requirements .....</b>	<b>Page 7</b>
	A. Fuel Burning Equipment .....	Page 7
	B. Stationary Internal Combustion Engines .....	Page 7
	C. Temporary Halting or Reducing of Activity.....	Page 8
	D. Opacity Limitations .....	Page 8
<b>SECTION 6</b>	<b>40 CFR Part 60 Subpart III Requirements for Compression Ignition (Diesel) Engines .....</b>	<b>Page 8</b>
	A. Applicability .....	Page 8
	B. Requirements for CI ICE Less Than 50 HP.....	Page 8
	C. Requirements for CI ICE Equal to or Greater Than 50 HP.....	Page 9
	D. Requirements for CI Fire Pump Engines .....	Page 10
	E. Additional Requirements for all CI ICE Subject to NSPS III.....	Page 11
<b>SECTION 7</b>	<b>40 CFR Part 60 Subpart JJJJ Requirements for Spark Ignition Engines .....</b>	<b>Page 12</b>
	A. Applicability .....	Page 12
	B. Performance Standards .....	Page 12
	C. Fuel Requirements .....	Page 14
	D. Deadlines for Installing SI ICE Subject to NSPS JJJJ.....	Page 14
	E. Additional Requirements.....	Page 14
<b>SECTION 8</b>	<b>40 CFR Part 63 Subpart ZZZZ Requirements for Reciprocating ICE.....</b>	<b>Page 14</b>
	A. Applicability .....	Page 15
	B. Compliance Date.....	Page 15
	C. Operating Requirements .....	Page 15
<b>SECTION 9</b>	<b>Odor Control Requirements .....</b>	<b>Page 16</b>
	A. Odor Control Requirements .....	Page 16
	B. Compliance Demonstration .....	Page 16
	C. Recordkeeping .....	Page 17

<b>SECTION 10</b>	<b>Monitoring and Recordkeeping Requirements.....</b>	<b>Page 17</b>
A.	Emergency Provision Recordkeeping Requirements .....	Page 17
B.	Logging Requirements for Facility Changes .....	Page 17
C.	Recordkeeping Requirements for Stationary Emergency ICE .....	Page 17
D.	Recordkeeping Requirements for Non-Road Engines .....	Page 18
E.	Records Retention Requirements .....	Page 18
<b>SECTION 11</b>	<b>Reporting Requirements.....</b>	<b>Page 18</b>
A.	Certification of Truth, Accuracy and Completeness .....	Page 18
B.	Deviations From Permit Requirements .....	Page 18
C.	Deviations From Ice Maintenance Schedule .....	Page 19
D.	Emergency Reporting .....	Page 19
E.	Emission Inventory .....	Page 19
F.	Excess Emissions Reporting .....	Page 19
G.	Facility Change Reporting .....	Page 19
H.	Fuel Sulfur Content Verification .....	Page 20
<b>SECTION 12</b>	<b>Fugitive Dust From Dust-Generating Operations.....</b>	<b>Page 20</b>
A.	Applicability .....	Page 20
B.	Exemptions .....	Page 20
C.	Opacity .....	Page 21
D.	Exemptions From Dust-Generating Operation Opacity Limitation Requirement .....	Page 21
E.	Stabilization Requirements For Dust-Generating Operations .....	Page 22
F.	Control Measures For Dust-Generating Operations .....	Page 24
G.	Trackout, Carry-Out, Spillage, and/or Erosion .....	Page 28
H.	Soil Moisture.....	Page 29
I.	Dust Control Training Classes For Dust-Generating Operations.....	Page 29
J.	Dust Control Coordinator For Dust-Generating Operations .....	Page 30
K.	Dust Control Plan.....	Page 30
L.	Dust Control Plan Contents .....	Page 30
M.	Recordkeeping .....	Page 31

## General Permit to Operate and/or Construct a Facility Operating Stationary Emergency Internal Combustion Engines (ICE)

### **SECTION 1: AUTHORITY**

This General Permit is authorized by Rule 200 and Rule 230 of the Maricopa County Air Pollution Control Rules and Regulations (Rules) pursuant to Section 49-480.J of the Arizona Revised Statutes (ARS). In that the Arizona Department of Environmental Quality has not issued a general permit for *facilities operating stationary emergency CI ICE* in Maricopa County as defined herein, the Maricopa County Air Quality Department is authorized to issue this General Permit.

[ARS §49-480.J] [County Rules 200 and 230]

### **SECTION 2: DEFINITIONS**

For the purposes of this General Permit, the following definitions shall apply:

***Commercial emergency stationary RICE*** means an emergency stationary reciprocating ICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor's offices, and sports and performing arts facilities.

***Compression ignition (CI)*** means reciprocating internal combustion engine with operating characteristics wherein the principal mechanism of igniting the fuel and air mixture in the cylinders is the compression of air in the cylinder until it is so hot that any fuel injected into the air or mixed with the air ignites. In this type of engine, a separate ignition source, such as a spark plug, is not used.

***Crankcase emissions*** mean substances emitted to the atmosphere from any part of an engine crankcase's ventilation or lubrication systems. The crankcase is the housing for the crankshaft and other related internal parts.

***Defeat device*** means an auxiliary emission-control device that reduces the effectiveness of emission controls for an engine under conditions that the engine may reasonably be expected to encounter during normal operation and use.

***Diesel fuel*** means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

***Emergency stationary internal combustion engine*** means any stationary ICE whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

***External Fuel Burning*** means a process involving the combustion of natural gas, propane or butane which does not include internal combustion engines, turbines, burn-off ovens, incinerators, crematories, or other equipment that requires a control device to comply with any requirements.

***Fire pump engine*** means an emergency stationary ICE certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

***Gasoline*** means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

***Institutional emergency stationary RICE*** means an emergency stationary reciprocating ICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

***Lean burn engine*** means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

***Liquefied petroleum gas (LPG)*** means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining or natural gas production.

***Maximum engine power*** means maximum engine power as defined in 40 CFR 1039.140 for compression ignition engines and 40 CFR 1048.801 for spark ignition engines.

***Model year*** means either:

- 1) The calendar year in which the engine was originally produced, or
- 2) The annual new model production period of the engine manufacturer if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year. For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was originally produced.

***Modification*** means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.

***Natural Gas*** means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane. For the purposes of this general permit, natural gas means pipeline quality fuel gas which contains no environmentally meaningful quantity of sulfur or fuel-bound nitrogen.

***Non-road engine*** means an ICE, that, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include but are not limited to, wheels, skids, carrying handles, dollies, trailers, or platforms. Any non-road engine, as defined in this part that remains or will remain at a location for more than 12 consecutive months is considered a stationary engine. A location is any single site at a building, structure, facility, or installation. Any engine(s) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

***Reconstruction*** means, with respect to engines, the replacement of components of an existing engine to such an extent that the fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable entirely new engine.

***Residential emergency stationary RICE*** means an emergency stationary reciprocating ICE used in residential establishments such as homes or apartment buildings.

***Responsible Official*** means one of the following:

- 1) For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of the fuel burning facilities;

- 2) For a partnership: A general partner;
- 3) For a sole proprietorship: The owner; or
- 4) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking official.

**Rich burn engine** means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to 6/12/06, with passive emission control technology for NO<sub>x</sub> (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2%

**Spark Ignition (SI)** means relating to either: a gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

**Stationary internal combustion engine** means any ICE, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary ICE is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition.

[County Rules 200 and 230][40 CFR §§ 60.4219, 60.4248, 63.6675]

### **SECTION 3: AUTHORITY UNDER THIS GENERAL PERMIT**

Any facility operating stationary emergency ICE shall be eligible for coverage under this General Permit if the facility meets the requirements as specified in the Operating Requirements in Sections 5-7 of this General Permit. However, if the operation does not meet the provisions of the Operating Requirements, the facility will be considered ineligible for coverage and the applicant shall be required by the Control Officer to obtain an individual source permit (a Non Title V or a Title V Permit)

#### **A. AUTHORITY TO OPERATE (ATO) OR CONSTRUCT**

A facility is not covered by this General Permit unless a complete application for an ATO is filed with the Control Officer.

[County Rule 230 §§303.1 & 303.3]

#### **B. EFFECTIVE DATE AND EXPIRATION DATE OF AUTHORIZATION**

This General Permit shall be valid for five years after the date it is signed by the Control Officer. All ATOs issued under this General Permit expire on the same date that this General Permit expires, regardless of when the ATO was issued. Any activity covered by this General Permit is authorized at the specified facility on the date the application is filed. The Control Officer will provide written notice of the expiration of this General Permit stating that the source must reapply for coverage.

[County Rule 210 §§302.1a] [County Rule 230 §306]

#### **C. FILING OF AN APPLICATION FOR AN ATO:**

Any facility that is eligible for this General Permit according to the requirements of Section 4 may apply for an ATO by completing the necessary application forms that are approved by the Control Officer. The application shall be completed, all necessary information provided, and the ATO application shall be signed by the responsible official before the application may be processed.

[County Rule 230 §302.4]

A source applying for an ATO under this Permit shall not propose nor accept pursuant to County Rule 220 emission limitations, controls, or other requirements that are not included in this General Permit.

[County Rule 230 §302.5]

**D. REQUIREMENT TO FILE FOR AN INDIVIDUAL SOURCE (NON-TITLE V) PERMIT**

1) Denial of an ATO

If the Control Officer notifies the Permittee that the application for coverage under the General Permit is denied, the applicant must file an individual source permit application within 180 days of receipt of the denial notice.

[County Rule 230 §303.3]

2) Revocation of Authority to Operate

If an ATO has been issued and the Permittee is later notified by the Control Officer of the revocation of the authority to operate under this General Permit because of expiration, termination, or cancellation, the Permittee must file an application for an individual source permit. The application for an individual source permit must be filed within 180 days of receiving the notice from the Control Officer. The Permittee may continue to operate under this General Permit until the earlier of either:

- a) The date that the Permittee submits a complete application for an individual source permit; or
- b) The date 180 days after receipt of the notice of expiration, termination, or cancellation of this general permit.
- c) The expiration date of this General Permit.

[County Rule 230 §311]

**E. ISSUANCE OF AN INDIVIDUAL SOURCE PERMIT**

If the Control Officer issues an Individual Source Permit authorizing the same activity that is authorized by an ATO issued under this General Permit, the ATO shall terminate on the date that the Individual Source Permit is issued.

[County Rule 230 §307]

**SECTION 4: GENERAL REQUIREMENTS**

**A. COMPLIANCE REQUIRED**

The Permittee shall comply with the conditions and provisions of this Permit, and all air quality requirements of the Federal Regulations, State Rules, and Maricopa County Rules. The Permittee shall halt or reduce activities if necessary to maintain compliance.

[County Rule 210 §302.1.h(2) and 230 §302.4.a]

**B. FACILITY CHANGES NOT REQUIRING A PERMIT REVISION**

- 1) Except for a physical change or change in the method of operation at facility requiring the Permittee to obtain an individual permit, or a change subject to logging or notice requirements in Conditions B.2 or B.3 of this Section, a change at the facility shall not be subject to revision, notice, or logging requirements of these General Permit Conditions.

[County Rule 220 §404.1]

- 2) The following changes may be made if the Permittee keeps on-site records of the changes according to Section 7 of this General Permit.

- a) Changing process equipment, operating procedures, or making any other physical change if the permit requires the changes to be logged;

- b) Engaging in any new exempted activity listed in County Rule 200, subsection 303.3(c), but not listed in the General Permit; and
  - c) Making a change that results in a decrease in actual emissions, if the Permittee wants to claim credit for the decrease in determining whether the Permittee has a net emissions increase for any purpose. The logged information shall include a description of the change that will produce the decrease in actual emissions. A decrease that has not been logged is creditable only if the decrease is quantifiable, enforceable, and otherwise qualifies as a creditable decrease.  
[County Rule 220 §404.2.b,c,d and e]
- 3) The following changes may be made if the Permittee provides written notice to the Control Officer in advance of the change as provided below:
- a) Making a physical change or a change in the method of operation that increases actual emissions more than 10% of the major source threshold for any conventional air pollutant but does not require a permit revision: no less than 7 days before the change;
  - b) Making any change that would trigger an applicable requirement that already exists in the permit: no less than 30 days before the change, unless otherwise required by an applicable requirement;
  - c) Making a change that amounts to reconstruction of the source or an affected facility: no less than 7 days before the change. For purposes of this subsection, reconstruction of a source or an affected facility shall be presumed if the fixed capital cost of the new components exceed 50% of the fixed capital cost of a comparable entirely new source or affected facility and the changes to the components have occurred over the 12 consecutive months beginning with commencement of construction; and
  - d) Making a change that will result in the emissions of a new regulated air pollutant above an applicable regulatory threshold, but that does not trigger a new applicable requirement for that source category: no less than 30 days before the change. For purposes of this requirement, an applicable regulatory threshold for a conventional air pollutant shall be 10% of the applicable major source threshold for that pollutant.  
[County Rule 220 §404.3.b, d, e and f]
- 4) For each change under Condition B.3 above, the written notice shall be by certified mail or hand delivery and shall be received by the Control Officer the minimum amount of time in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided with less than required notice, but must be provided as far in advance of the change, or if advance notification is not practicable, as soon after the change, as possible.  
[County Rule 220 §404.4]
- 5) The written notice shall include:
- a) When the proposed change will occur;
  - b) A description of the change;
  - c) Any change in emissions of regulated air pollutants; and
  - d) Any permit term or condition that is no longer applicable as a result of the change.  
[County Rule 220 §404.5]
- 6) Notwithstanding any other Condition of this General Permit, the Control Officer may require the Permittee to obtain a new ATO or an individual permit for any change that, when considered together with any other changes submitted by the same facility under this Condition over a 5 year term, constitutes a change under

County Rule 220 Section 403.2.

[County Rule 220 §404.6]

- 7) If a source change is described under both Condition B.2 and B.3 of this section, the source shall comply with Condition B.3 of this section.

[County Rule 220 §404.7]

- 8) If a source change is described under both Conditions B.3 and County Rule 220 section 403.1, the Permittee shall apply for a new ATO.

[County Rule 220 §404.8]

- 9) A Permittee may implement any change under Condition B.3 above without the required notice by applying for a new ATO.

[County Rule 220 §404.9]

**C. PAY APPLICABLE FEES**

Sources applying for and operating under an ATO for this General Permit shall pay all fees to the Control Officer pursuant to Rule 280 of the Maricopa County Air Pollution Control Regulations.

[County Rule 280]

**D. POSTING OF A PERMIT**

The Permittee shall post a copy of the ATO at the covered facility in such a manner as to be clearly visible. A complete copy of the General Permit and the original ATO shall be kept on the site during the life of the permit.

[County Rule 200 §311]

**E. PROPERTY RIGHTS**

This General Permit does not convey any property rights of any sort, or any exclusive privilege.

[County Rule 210 §302.1.h(4) and County Rule 230 §302.4.a]

**F. RIGHT TO ENTRY AND INSPECTION**

For the purpose of assuring compliance with this General Permit, the Permittee shall allow the Control Officer or authorized representative, upon presentation of proper credentials:

- 1) To enter upon the Permittee's premises where the source is located or emissions-related activity is conducted, or where records are required to be kept pursuant to the conditions of this Permit, and
- 2) To have access to and copy, at reasonable times, any records required to be kept under the terms and conditions of this General Permit, and
- 3) To inspect any source, at reasonable times, equipment (including monitoring and air pollution control devices), practices or operations regulated or required in this General Permit, and
- 4) To sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this General Permit or other applicable requirements, and
- 5) To record any inspection by use of written, electronic, magnetic, and photographic media.

[County Rule 220 §302.17,18,19,20,21]

**G. SEVERABILITY**

The provisions of this General Permit are severable and, if any provision of this General Permit is held invalid, the remainder of this General Permit shall remain valid.

[County Rule 210 §302.1.g and 230 §302.4.a]

## **SECTION 5: GENERAL OPERATING REQUIREMENTS**

### **A. FUEL BURNING EQUIPMENT (BOILERS AND HOT WATER HEATERS)**

- 1) The Permittee shall only burn natural gas, propane, and butane as fuels in the fuel burning equipment.
- 2) The maximum aggregated heat input rating for all fuel burning equipment (excluding internal combustion engines) at the facility as a whole shall be less than 10 million BTU/Hr.

[County Rule 200 §309]

### **B. STATIONARY INTERNAL COMBUSTION ENGINES (ICE)**

The Permittee shall comply with the following requirements for all stationary ICE at the facility:

- 1) Only emergency ICE may construct or operate under this General Permit.  
[County Rule 230 §301] [County Rule 220 §302.2]
- 2) The total combined maximum engine power rating of all ICE shall not exceed 2,500 horsepower (HP).  
[County Rule 230 §301] [County Rule 220 §302.2]
- 3) The Permittee shall limit the total hours of operation of each ICE to no more than 500 hours per any twelve consecutive months, including the time used for maintenance checks and readiness testing. The daily trigger of Best Available Control Technology (BACT) has been exempted for the emergency ICE.  
[County Rule 220 §302.2] [County Rule 324 §§104.5, 205]
- 4) The Permittee shall limit the operation of each ICE to no more than 100 hours per calendar year for the purpose of maintenance checks and readiness testing. For any emergency ICE with a maximum engine power rating less than or equal to 50 brake horsepower, the Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year.  
[County Rule 324 §§104, 205] [40 CFR 60.4211(e), 60.4243(d), 63.6640(f)(1)(ii)]
- 5) The emergency ICE shall not be used for peak shaving. The emergency ICE shall only be used for the following purposes:
  - a) For power when normal power service fails from the serving utility or if onsite electrical transmission or onsite power generation equipment fails;
  - b) Emergency pumping of water resulting from a flood, fire, lightning strikes, police action or for any other essential public services which affect the public health and safety;
  - c) Lighting airport runways;
  - d) Sewage overflow mitigation and/or prevention;
  - e) Maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine;
  - f) As the prime engine when the prime engine has failed, but only for such time as is needed to repair the prime engine; or
  - g) To operate standby emergency water pumps for fire control that activate when sensors detect low water pressure.

[County Rule 324 §104] [40 CFR §§60.4211(e), 63.6640(f)]

- 6) The Permittee shall not burn any fuel containing more than 500 ppm sulfur. Additional fuel requirements for compression ignition (CI) ICE subject to 40 CFR 60 Subpart IIII are specified in Section 6.E.5) of this Permit. Additional fuel requirements for gasoline-fueled engines subject to 40 CFR 60 Subpart JJJJ are specified in Section 7.

[County Rule 324 §301.1]

- 7) Each emergency ICE shall be equipped with a non-resettable hour meter.

[County Rule 230 §301] [County Rule 220 §302.4] [40 CFR 60.4209, 60.4237, 63.6625(f)]

**C. TEMPORARY HALTING OR REDUCING OF ACTIVITY**

The Permittee shall halt or reduce activities, if necessary, in order to maintain compliance with conditions of this General Permit.

[County Rule 210 §302.1(h)(2)] [County Rule 230 §302.4(a)]

**D. OPACITY LIMITATIONS**

Unless otherwise stated in this Permit, the Permittee shall not discharge into the ambient air from any single source of emissions any air contaminate, other than uncombined water, in excess of 20% opacity.

[County Rule 300 §501] [County Rule 324 §303]

**SECTION 6: SPECIFIC REQUIREMENTS FOR COMPRESSION IGNITION (CI) ICE SUBJECT TO: 40 CFR PART 60 SUBPART IIII - STANDARDS OF PERFORMANCE FOR STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES**

**A. APPLICABILITY:**

The following engines are subject to all applicable requirements of this Permit Section:

- 1) Any emergency stationary CI ICE that is not a fire pump engine that was ordered after July 11, 2005 and manufactured after April 1, 2006.
- 2) Any stationary CI fire pump engine ordered after July 11, 2005 and manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.
- 3) Any stationary emergency CI ICE that was modified or reconstructed after July 11, 2005.

[40 CFR 60.4200(a)]

**B. REQUIREMENTS FOR STATIONARY CI ICE WITH A MAXIMUM ENGINE POWER LESS THAN 50 HP, EXCLUDING FIRE PUMP ENGINES:**

- 1) Emission Standards:

Stationary emergency ICE, excluding fire pump engines, with a maximum engine power less than 50 HP shall comply with the emission standards in Table 1 below:

**TABLE 1**  
**Emission Standards for Stationary CI ICE < 37 KW (50 HP) in g/KW-hr (g/HP-hr)**

Maximum engine power	Model Years	NMHC + NO <sub>x</sub>	CO	PM	Nonroad Engine Emission Rating
KW<8 (HP<11)	Pre-2007	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)	Tier 1
	2007	7.5 (5.6)	8.0 (6.0)	0.80 (0.60)	Tier 2
	2008+	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)	Tier 4
8≤KW<19 (11≤HP<25)	Pre-2007	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)	Tier 1
	2007	7.5 (5.6)	6.6 (4.9)	0.80 (0.60)	Tier 2

**General Permit to Operate and/or Construct a Facility Operating Stationary Emergency Internal Combustion Engines**

	2008+	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)	Tier 4
19≤KW<37 (25≤HP<50)	Pre-2007	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)	Tier 1
	2007	7.5 (5.6)	5.5 (4.1)	0.60 (0.44)	Tier 2
	2008+	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)	Tier 4

## 2) Compliance Demonstration:

- a) Pre-2007 model year engines: The Permittee shall demonstrate compliance with the emission standards in Table 1 by one of the following:
  - (1) Purchasing an engine certified to the applicable emission standards for the same maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
  - (2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in 40 CFR §60.4212 and these methods must have been followed correctly.
  - (3) Keeping records of data from the engine manufacturer or control device vendor indicating compliance with the standards.
  - (4) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 CFR §60.4212, as applicable.
- b) 2007 model year and later engines: Engines shall be certified by the manufacturer to meet the standards in Table 1 for the same maximum engine power category and corresponding model year.

## 1) Crankcase emissions (model year 2007 and later ICE):

- a) Naturally aspirated 2007 model year ICE shall not discharge crankcase emissions into the ambient atmosphere, unless such crankcase emissions are permanently routed into the exhaust and included in all exhaust emission measurements. This provision does not apply to engines using turbochargers, pumps, blowers, or superchargers for air induction.
- b) Crankcase emissions may not be discharged directly into the ambient atmosphere from any model year 2008 and later ICE, unless the emissions are added to the exhaust emissions (either physically or mathematically) during all emission testing. Crankcase emissions that are routed to the exhaust upstream of exhaust aftertreatment during all operations are not considered to be discharged directly into the ambient atmosphere.

## 2) Adjustable Parameters (model year 2008 and later ICE):

2008 model year and later ICE that have adjustable parameters must meet all the requirements of this permit for any adjustment in the physically adjustable range.

## 3) Defeat devices (model year 2008 and later ICE):

The Permittee shall not equip any ICE with a defeat device, as defined in this permit.

[40 CFR 60.4205(a)-(b), 60.4211(b)-(c), 63.6590(c)]

**C. REQUIREMENTS FOR CI ENGINES WITH A MAXIMUM ENGINE POWER EQUAL TO OR GREATER THAN 50 HP, EXCLUDING FIRE PUMP ENGINES:**

## 1) Emission Standards

Emergency CI ICE, excluding fire pump engines, subject to Section 6 of these Permit Conditions shall comply with the emission standards in Table 2 below:

**TABLE 2****Emission Standards for Stationary CI Engines  $\geq 37$  KW (50 HP) in g/KW-hr (g/HP-hr)**

Maximum engine power	Model Years	NMHC + NO <sub>x</sub>	HC	NO <sub>x</sub>	CO	PM	Nonroad Engine Emission Rating
37≤KW<75 (50≤HP<100)	Pre-2007			9.2 (6.9)			Tier 1
	2007	7.5 (5.6)			5.0 (3.7)	0.4 (0.3)	Tier 2
	2008+	4.7 (3.5)			5.0 (3.7)	0.4 (0.3)	Tier 3
75≤KW<130 (100≤HP<175)	Pre-2007			9.2 (6.9)			Tier 1
	2007+	4.0 (3.0)			5.0 (3.7)	0.30 (0.22)	Tier 3
130≤KW≤560 (175≤HP≤750)	Pre-2007		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)	Tier 1
	2007+	4.0 (3.0)			3.5 (2.6)	0.2 (0.15)	Tier 3
KW>560 (HP>750)	Pre-2007		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)	Tier 1
	2007+	6.4 (4.8)			3.5 (2.6)	0.2 (0.15)	Tier 2

**2) Compliance Demonstration**

- a) Pre-2007 model year ICE: The Permittee shall demonstrate compliance with the emission standards of Table 2 using one of the methods listed in Condition B.2.a.1-4 of this Section.
- b) 2007 model year and later ICE: Engines shall be certified by the manufacturer to meet the standards in Table 2 for the same maximum engine power category and corresponding model year.

**3) Crankcase emissions (model year 2007 and later ICE):**

Naturally aspirated ICE shall not discharge crankcase emissions into the ambient atmosphere, unless such crankcase emissions are permanently routed into the exhaust and included in all exhaust emission measurements. This provision does not apply to engines using turbochargers, pumps, blowers, or superchargers for air induction.

[40 CFR 60.4205(a)-(b), 60.4211(b)-(c), 63.6590(c)]

**D. REQUIREMENTS FOR CI FIRE PUMP ENGINES****1) Emission Standards**

The Permittee shall comply with the emission standards in Table 3 below for fire pump engines:

**Table 3**  
**Emission Standards for Stationary Fire Pump Engines**

Maximum engine power	Model years	Nonroad Engine Emission Rating	NMHC + NO <sub>x</sub>	CO	PM
KW<8 (HP<11)	2010 and earlier	Tier 1	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011+	Tier 4 <sup>1</sup>	7.5 (5.6)		0.40 (0.30)
8≤KW<19 (11≤HP<25)	2010 and earlier	Tier 1	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)
	2011+	Tier 4 <sup>1</sup>	7.5 (5.6)		0.40 (0.30)
19≤KW<37 (25≤HP<50)	2010 and earlier	Tier 1	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)
	2011+	Tier 4 <sup>1</sup>	7.5 (5.6)		0.30 (0.22)

**General Permit to Operate and/or Construct a Facility Operating Stationary Emergency Internal Combustion Engines**

37≤KW<75 (50≤HP<100)	2010 and earlier	---	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011–2013 <sup>2</sup>	---	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+	Tier 3 <sup>1</sup>	4.7 (3.5)		0.40 (0.30)
75≤KW<130 (100≤HP<175)	2009 and earlier	---	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2010–2012 <sup>2</sup>	---	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2010+	Tier 3 <sup>1</sup>	4.0 (3.0)		0.30 (0.22)
130≤KW<450 (175≤HP<600)	2008 and earlier	---	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009–2011 <sup>2</sup>	---	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+	Tier 3 <sup>1</sup>	4.0 (3.0)		0.20 (0.15)
450≤KW≤560 (600≤HP≤750)	2008 and earlier	---	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+	Tier 3 <sup>1</sup>	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	---	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008+	Tier 2 <sup>1</sup>	6.4 (4.8)		0.20 (0.15)

<sup>1</sup> These engine emission ratings are for reference purposes only but can be used by the Permittee to demonstrate compliance with the pollutant emission standards.

<sup>2</sup> The emission standards for these specified model year ranges only apply to engines in the specified maximum engine power category that have a rated speed greater than 2,650 revolutions per minute (rpm).

2) The Permittee shall demonstrate compliance as follows:

- a) For fire pumps manufactured during or after the model years in Table 4, the Permittee shall purchase engines certified to the emission standards in Table 3 for the same model year and NFPA nameplate engine power.

**TABLE 4**  
**Certification Requirements for Stationary CI Fire Pump Engines**

Engine power	Starting model year new fire pump engines must be certified
KW<75 (HP<100)	2011
75≤KW<130 (100≤HP<175)	2010
130≤KW<185 (175≤HP<250)	2009

- b) For fire pumps manufactured before the applicable model years in Table 4, the Permittee shall demonstrate compliance with the emission standards of Table 3 using one of the methods listed in Condition B.2.a.1-4 of this Section.

[40 CFR §§60.4205(c), 60.4211(c), 63.6590(c)]

**E. ADDITIONAL REQUIREMENTS FOR ALL EMERGENCY CI ICE SUBJECT TO NSPS IIII**

1) Deadlines for installing stationary CI ICE:

- a) After December 31, 2008, the Permittee shall not install stationary CI ICE, excluding fire pump engines, that do not meet the applicable requirements for 2007 model year engines.

- b) After December 31, 2009, the Permittee shall not install stationary CI ICE, excluding fire pump engines, that do not meet the applicable requirements for 2008 model year engines.
  - c) These deadlines do not apply to stationary CI ICE that have been modified or reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.
- 2) The Permittee shall operate and maintain the engine according to the manufacturer's written instructions, or procedures developed by the Permittee that are approved by the engine manufacturer, over the entire life of the engine.
  - 3) The Permittee shall only change those engine settings that are permitted by the manufacturer.
  - 4) Beginning October 12, 2010, the Permittee shall only purchase diesel fuel for engines subject to NSPS IIII that meets the following requirements:
    - a) Has a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent; and
    - b) Has a maximum sulfur content of 15 parts per million (ppm).

[40 CFR 60.4206, 60.4207(b), 60.4208, 60.4211(a), 63.6590(c)]

**SECTION 7: SPECIFIC REQUIREMENTS FOR SPARK IGNITION (SI) ICE SUBJECT TO: 40 CFR PART 60**  
**SUBPART JJJJ - STANDARDS OF PERFORMANCE FOR STATIONARY SPARK IGNITION**  
**INTERNAL COMBUSTION ENGINES**

**A. SECTION APPLICABILITY**

The following engines are subject to all applicable requirements of this Permit Section:

- 1) Any emergency stationary SI ICE that was ordered after June 12, 2006 and manufactured after January 1, 2009.
- 2) Any stationary emergency SI ICE that was modified or reconstructed after June 12, 2006.

[40 CFR 60.4230(a)]

**B. PERFORMANCE STANDARDS**

Stationary SI ICE shall be certified by the engine manufacturer to meet the following emission standards

- 1) Stationary SI ICE with a maximum engine power less than or equal to 25 HP manufactured on or after July 1, 2008 or that have been modified or reconstructed after June 12, 2006 shall be certified to meet the emission standards and related requirements for nonhandheld engines in Table 5. Engines with a date of manufacture prior to 7/1/08 must comply with the emission standards specified in Table 5 applicable to engines manufactured on 7/1/08.

**TABLE 5**  
**Certification Requirements for Stationary SI ICE  $\leq$  25HP**

Engine Displacement	Manufacture Date	Emission Standards
< 225 cc	7/1/08 to 12/31/11	40 CFR part 90.
	1/1/12 or later	40 CFR part 1054.
$\geq$ 225 cc	7/1/08 to 12/31/10	40 CFR part 90.
	1/1/11 or later	40 CFR part 1054.

cc = cubic centimeters

- 2) Gasoline and rich burn LPG engines with a maximum engine power greater than 25 HP manufactured after January 1, 2009 or that have been modified or reconstructed after June 12, 2006 shall be certified to meet the emission standards and related requirements in Table 6. Engines with a date of manufacture prior to 1/1/09 must comply with the emission standards specified in Table 6 applicable to engines manufactured on 1/1/09.

**TABLE 6**  
**Certification Requirements for Gasoline and Rich Burn LPG Engines >25 HP**

Maximum Engine Power	Manufacture Date	Requirement
≥ 130 HP	1/1/09	40 CFR part 1048
25 < HP < 130	1/1/09	Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines
Alternative for SI ICE 25 < HP ≤ 40, total displacement ≤ 1,000 cc	1/1/09	40 CFR part 90 or 1054, as appropriate

[40 CFR 60.4233(b)-(c), 60.4233(f)(2)-(3)]

- 3) SI ICE with a maximum engine power greater than 25 HP, excluding gasoline and rich burn LPG engines, shall be certified to meet the emission standards in Table 7. For engines with a maximum engine power greater than 100 HP manufactured prior to 1/1/2011, that were certified to the standards in 40 CFR Part 1048 applicable to engines that are not severe duty engines, if such engine was certified to a CO standard above the standard in Table 7, the Permittee may meet the CO certification standard for which the engine was certified.

**TABLE 7**  
**Certification Requirements for New SI ICE >25 HP, Excluding Gasoline and Rich Burn LPG Engines**

Maximum Engine Power	Manufacture Date	Emission Standards						
		g/HP-hr				ppmvd at 15% O <sub>2</sub>		
		NO <sub>x</sub>	CO	VOC	NO <sub>x</sub> + HC	NO <sub>x</sub>	CO	VOC
25 < HP < 130	1/1/2009	N/A	387	N/A	10	N/A	N/A	N/A
HP ≥ 130	1/1/2009	2.0	4.0	1.0	N/A	160	540	86
25 < HP < 100 alternative standard	1/1/09 – 12/31/2010	2.0	4.0	1.0	N/A	160	540	86

[40 CFR 60.4233(d)-(e)]

- 4) Natural gas and lean burn LPG engines with a maximum engine power greater than 25 HP but less than 130 HP that were manufactured prior to 1/1/2009 and modified or reconstructed after 6/12/06 shall comply with the emission standards in Table 7.

[40 CFR 60.4233(f)(4)]

- 5) Natural gas and lean burn LPG engines with a maximum engine power equal to or greater than 130 HP that were manufactured prior to 1/1/2009 and modified or reconstructed after 6/12/06 shall comply with the emission standards in Table 8.

**TABLE 8****Emission Standards for Modified and Reconstructed Natural Gas and Lean Burn LPG Engines >130 HP**

Maximum Engine Power	Emission Standards					
	g/HP-hr			ppmvd at 15% O <sub>2</sub>		
	NO <sub>x</sub>	CO	VOC	NO <sub>x</sub>	CO	VOC
HP≥130	3.0	4.0	1.0	250	540	83

[40 CFR 60.4233(f)(4)]

**C. FUEL REQUIREMENTS**

- 1) The Permittee shall only operate stationary SI ICE using gasoline, natural gas, or LPG, as defined in this Permit.

[Rule 220 §302.2]

- 2) The Permittee may operate a stationary SI natural gas fired engine using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the Permittee shall conduct a performance test to demonstrate compliance with the emission standards of §60.4233.

[40 CFR 60.4243(e)]

- 3) Engines that burn gasoline must meet gasoline sulfur standards of 30 ppm per gallon as a refinery or importer average and 80 ppm per gallon as a per-gallon cap.

[40 CFR 60.4235]

**D. DEADLINES FOR INSTALLING STATIONARY SI ICE SUBJECT TO NSPS JJJJ**

- 1) After July 1, 2010, the Permittee shall not install stationary SI ICE with a maximum engine power equal to or less than 25 HP that do not meet the applicable requirements in 40 CFR 60.4233.
- 2) After January 1, 2011, the Permittee shall not install stationary SI ICE with a maximum engine power greater than 25 HP that do not meet the applicable requirements in 40 CFR 60.4233.
- 3) These deadlines do not apply to stationary CI ICE that have been modified or reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

[40 CFR 60.4236]

**E. ADDITIONAL REQUIREMENTS**

- 1) The Permittee shall operate and maintain the certified SI ICE according to the manufacturer's emission-related written instructions.
- 2) The Permittee shall retain written records of all maintenance performed on the SI ICE.
- 5) The Permittee shall meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply

[40 CFR 60.4243(a), 63.6590(c)]

**SECTION 8: SPECIFIC REQUIREMENTS FOR STATIONARY RECIPROCATING ICE SUBJECT TO: 40 CFR PART 60 SUBPART ZZZZ - NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES (RICE)**

**A. SECTION APPLICABILITY**

The requirements of this Permit Section apply to each stationary RICE that was ordered by the original owner prior to 6/12/06, except for the following:

- 1) Residential, commercial, and institutional emergency RICE.
- 2) Emergency RICE subject to 40 CFR Part 60 Subpart IIII (identified in Section 6.A of these Permit Conditions). If a RICE is subject to both 40 CFR Part 60 Subpart IIII and Part 63 Subpart ZZZZ (Section 8 of these Permit Conditions), compliance with Subpart IIII constitutes compliance with Subpart ZZZZ.
- 3) Emergency RICE subject to 40 CFR 60 Subpart JJJJ (identified in Section 7.A of these Permit Conditions). If a RICE is subject to both 40 CFR Part 60 Subpart JJJJ and Part 63 Subpart ZZZZ (Section 8 of these Permit Conditions), compliance with Subpart JJJJ constitutes compliance with Subpart ZZZZ
- 4) Stationary RICE that is tested at a stationary test cell/stand.
- 5) Stationary RICE that is used for national security purposes.

[40 CFR 63.6585] [40 CFR 63.6590]

**B. COMPLIANCE DATE:**

The Permittee shall ensure compliance with all applicable requirements of this Permit Section no later than May 3, 2013.

[40 CFR 63.6595]

**C. OPERATING REQUIREMENTS**

- 1) The Permittee shall operate and maintain all RICE and associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Control Officer which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.6605]

- 2) The Permittee shall operate and maintain all RICE according to the manufacturer's emission-related operation and maintenance instructions or develop and follow the Permittee's own maintenance plan which must provide to the extent practicable for the operation and maintenance of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR 63.6625(e) & 63.6605(b)]

- 3) The Permittee shall comply with the following maintenance schedule:

- a) Change oil and filter or perform an Oil Analysis Program every 500 hours of operation or annually, whichever comes first. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity and percent water content. The condemning limits for these parameters are as follows:
  - i. Total Base Number is less than 30 percent of the Total Base Number of the oil when new;
  - ii. Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new;
  - iii. Percent water content (by volume) is greater than 0.5.

If none of these limits are exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee must change the oil before continuing to use the engine. The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and

the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

- b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
- c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR 63.6603(a); Table 2d(4)]

- 2) If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the maintenance requirements on the schedule required by this Condition, or if performing the maintenance operations on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the maintenance operations can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The maintenance operations shall be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the maintenance operations on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable, in accordance with Section 10.C of these Permit Conditions.

[40 CFR 63.6603(a); Table 2d]

- 3) During periods of startup, the Permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 CFR 63.6625(h)]

## **SECTION 9: ODORS AND GASEOUS AIR CONTAMINANTS**

### **A. ODOR CONTROL REQUIREMENTS**

- 1. The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.  
[Rule 320 §300]
- 2. Reasonable Stack Height Required: Where a stack, vent or other outlet is at such a level that air contaminants are discharged to adjoining property, the Control Officer may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet to a degree that will adequately dilute, reduce or eliminate the discharge of air contaminants to adjoining property.  
[Rule 320 §303]
- 3. Limitation: Hydrogen Sulfide  
The Permittee shall not emit hydrogen sulfide from any location in such a manner or amount that the concentration of such emissions into the ambient air at any occupied place beyond the premises on which the source is located exceeds 0.03 parts per million by volume for any averaging period of 30 minutes or more.

[Rule 320 §304]

### **B. COMPLIANCE DEMONSTRATION:**

Within 90 days of either:

- 1. Receipt of three odor complaints or,
- 2. The reception of a written request from the Department.
- 3. The Permittee shall perform a compliance demonstration by one of the following methods:
  - a) Conduct a test to monitor hydrogen sulfide levels, or
  - b) Conduct an engineering evaluation (air dispersion modeling and analysis) to determine the hydrogen sulfide concentration levels.

4. The compliance demonstration shall be performed at a location representing the nearest occupied place beyond the premises on which the source of hydrogen sulfide is located.

[Rule 220 §302.4] [Rule 320 §304]

**C. RECORDKEEPING:**

The Permittee shall maintain records of any process upsets that would cause the release of hydrogen sulfide or other waste gases into the atmosphere. The Permittee shall keep the records on site and available upon request. The records shall be retained for 5 years.

[Rule 220 §§302.7, 500] [Rule 100 §504]

**SECTION 10: MONITORING AND RECORDKEEPING REQUIREMENTS**

**A. EMERGENCY PROVISION RECORDKEEPING REQUIREMENTS**

The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- 1) An emergency occurred and the Permittee can identify the cause or causes of the emergency;
- 2) At the time of the emergency, the permitted source was being properly operated;
- 3) During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
- 4) The Permittee met the Emergency Reporting requirements in the Reporting Section of these Permit Conditions.

[County Rule 130 §402]

**B. LOGGING REQUIREMENTS FOR FACILITY CHANGES**

If the Permittee makes a change that is required to be logged by the Facility Change conditions in the General Requirements section of these Permit Conditions, then the Permittee shall perform such logging in indelible ink in a bound logbook with sequentially numbered pages, or in any other form, including electronic format, if approved by the Control Officer. Each log entry shall include at least the following information:

- 1) A description of each change including:
  - a) A description of any process change;
  - b) A description of any equipment change, including both old and new equipment descriptions, model numbers, and serial numbers, or any other unique equipment number; and
  - c) A description of any process material change.
- 2) The date and time that the change occurred;
- 3) The provision of this General Permit that authorizes the change to be made with logging; and
- 4) The date the log entry was made and the first and last name of the person making the log entry.

[County Rule 220 §502]

**C. RECORDKEEPING REQUIREMENTS FOR STATIONARY EMERGENCY ICE**

- 1) The Permittee shall maintain monthly records of engine operation. The records shall include the purpose of operation and the duration of time the engine was operated. The record shall identify whenever the operation of the engine was for emergency purposes.

[40 CFR 60.4211(e), 63.6655(f)] [County Rule 220 §302.5] [County Rule 230 §301]

- 2) For each emergency ICE subject to Section 6 or 7 of these Permit Conditions, the Permittee shall maintain a

copy of engine manufacturer data indicating compliance with the standards in this Permit.

[40 CFR 60.4211(b)(3), 60.4243(a)(1)] [County Rule 220 §302.5] [County Rule 230 §301]

- 3) For each emergency ICE subject to Section 6 of these Permit Conditions, the Permittee shall maintain an onsite copy of the engine manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer.

[40 CFR 60.4211(a)] [County Rule 220 §302.7] [County Rule 230 §301]

- 4) For each emergency ICE subject to Section 8 of these Permit Conditions, the Permittee shall maintain records which must include, at a minimum, the following

- a) Oil and filter change dates and corresponding hour on the hour meter;
- b) Inspection and replacement dates for air cleaners, hoses, and belts; and
- c) Records of other emission-related repairs and maintenance performed.

[40 CFR 63.6655(e)(2) & 63.6660]

**D. RECORDKEEPING REQUIREMENTS FOR NON-ROAD ENGINES**

The Permittee shall maintain a log of the start-up date and location of any non-road engines at the facility. The log shall be updated any time a non-road engine moves from any given location at the facility.

[County Rule 220 §302.7]

**E. RECORDS RETENTION REQUIREMENTS**

Any records required by these Permit Conditions shall be retained for five years and shall be made available to the Control Officer upon request.

[County Rule 100 §504] [County Rule 220 §501][40 CFR §63.6650]

**SECTION 11: REPORTING REQUIREMENTS**

**A. CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS**

Any document that is required to be submitted by this General Permit, including reports, shall contain a certification by the facility owner, or other responsible official as defined in County Rule 100 § 200.95, of truth, accuracy, and completeness. This certification and any other certification required under this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[County Rule 100 §401] [County Rule 220 §302.14]

**B. DEVIATIONS FROM PERMIT REQUIREMENTS**

The Permittee shall report any deviations from the permit requirements, including those attributable to upset conditions, the probable cause of such deviations, and any corrective actions or preventive measures taken. The Permittee shall submit the report to the Control Officer, Attn: Compliance Division Manager, within 2 working days from knowledge of the deviation.

[County Rule 210 §302.1e] [County Rule 230 §§302.4a and 305.1c]

**C. DEVIATIONS FROM ICE MAINTENANCE SCHEDULE:**

The Permittee shall report any failure to perform a maintenance operation on the schedule required by Section 8.C.3) of this Permit and the Federal, State or local law under which the risk was deemed unacceptable. The Report shall be submitted to the Control Officer, Attn: Compliance Division Manager, within 2 working days after the date on which the maintenance operation was required to be performed. A subsequent report shall be submitted to the Control Officer within 2 working days after the required maintenance operation is performed.

[County Rule 220 §302.8] [40 CFR 63.6603(a)]

**D. EMERGENCY REPORTING**

The Permittee, as soon as possible, shall telephone the Control Officer giving notice of the emergency and shall submit a notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

[County Rule 130 §402]

**E. EMISSION INVENTORY**

If notified by the Control Officer, the Permittee shall submit an annual emissions inventory report to the Maricopa County Air Quality Department, Attention: Air Quality Emissions Unit Manager, in accordance with Rule 100 of the Maricopa County Air Pollution Control Regulations. The report shall include the throughput and any excess emissions reported during the previous calendar year.

[County Rule 100 §505]

**F. EXCESS EMISSIONS REPORTING**

- 1) The Permittee shall report to the Control Officer any emissions in excess of the limits established by these rules or by the applicable permit. The report shall be in two parts as specified below:
  - a) Initial notification by telephone or facsimile within 24 hours of the time when the owner and/or operator first learned of the occurrence of excess emissions that includes all available information from the Excess Emissions Recordkeeping section of this General Permit.
  - b) Detailed written follow-up notification by submission of an excess emissions report within 72 hours of the initial notification.
- 2) The excess emissions report shall contain the following information:
  - a) The identity of each stack or other emission point where the excess emissions occurred;
  - b) The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
  - c) The time and duration or expected duration of the excess emissions;
  - d) The identity of the equipment from which the excess emissions emanated;
  - e) The nature and cause of such emissions;
  - f) The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions;
  - g) The steps that were or are being taken to limit the excess emissions; and
  - h) If the source's permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the permit procedures.
- 3) In the case of continuous or recurring excess emissions, the notification requirements of this rule shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional initial and follow-up notification pursuant to this Permit Condition.

[County Rule 140 §500]

**G. FACILITY CHANGE REPORTING**

- 1) Any advance written notice required by the Allowable Facility Change section of this Permit shall meet all of

the following requirements:

- a) The notice shall be by certified mail or hand delivery and shall be received by the Control Officer the minimum amount of time in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided with less than required notice, but must be provided as far in advance of the change, or if advance notification is not practicable, as soon after the change, as possible.

[County Rule 220 §404.4]

- b) The written notice shall include:

- 1) When the proposed change will occur;
- 2) A description of the change;
- 3) Any change in emissions of regulated air pollutants; and
- 4) Any permit term or condition that is no longer applicable as a result of the change.

[County Rule 220 §404.5]

- 2) Annual Facility Change Report

The Permittee shall file a copy of all facility change logs required by this General Permit with the Control Officer within 30 days after each anniversary of the permit issue date. If no changes were made at the source requiring logging, a statement to that effect shall be filed instead.

[County Rule 220 §503]

#### **H. FUEL SULFUR CONTENT VERIFICATION**

If the Control Officer requests proof of the sulfur content of fuel burned in the engines, the Permittee shall submit fuel receipts, contract specifications, pipeline meter tickets, Material Safety Data Sheets (MSDS), fuel supplier information or purchase records, if applicable, from the fuel supplier, indicating the sulfur content of the fuel oil. In lieu of these, testing of the fuel oil for sulfur content to meet the applicable sulfur limit shall be permitted if so desired by the owner or operator for evidence of compliance.

[County Rule 220 §302.7] [County Rule 230 §301]

### **SECTION 12: FUGITIVE DUST FROM DUST-GENERATING OPERATIONS**

#### **A. APPLICABILITY:**

The provisions of this Section apply to all dust-generating operations except for those dust-generating operations listed in Condition B of this Section. Any person engaged in a dust-generating operation subject to this Section shall be subject to the standards and/or requirements of this Section before, after, and while conducting such dust-generating operation, including during weekends, after work hours, and on holidays. Failure to comply with any one of the following requirements shall constitute a violation.

[County Rule 310 §§102, 301]

#### **B. EXEMPTIONS:**

The provisions of this Section shall not apply to the following activities:

- 1) The provisions of this Section shall not apply to normal farm cultural practices according to ARS § 49-457 and ARS § 49-504.4.
- 2) The provisions of this Section shall not apply to emergency activities that may disturb the soil conducted by any utility or government agency in order to prevent public injury or to restore critical utilities to functional status.
- 3) An area is considered to be a disturbed surface area until the activity that caused the disturbance has been completed and the disturbed surface area meets the standards described in Section E of this Permit.

- 4) Establishing initial landscapes without the use of mechanized equipment, conducting landscape maintenance without the use of mechanized equipment, and playing on or maintaining a field used for non-motorized sports shall not be considered a dust-generating operation. However, establishing initial landscapes without the use of mechanized equipment and conducting landscape maintenance without the use of mechanized equipment shall not include grading, or trenching performed to establish initial landscapes or to redesign existing landscapes.
- 5) Fugitive dust does not include particulate matter emitted directly from the exhaust of motor vehicles and other internal combustion engines, from portable brazing, soldering, or welding equipment, and from piledrivers, and does not include emissions from process and combustion sources that are subject to other MCAQD rules in Regulation III-Control of Air Contaminants.

[County Rule 310 §103]

**C. OPACITY:**

- 1) The Permittee shall not cause or allow visible fugitive dust emissions to exceed 20% opacity.
- 2) The Permittee shall not cause, suffer, or allow visible emissions of particulate matter, including fugitive dust, beyond the property line within which the emissions are generated. Visible emissions shall be determined by a standard of no visible emissions exceeding 30 seconds in duration in any six-minute period as determined by using EPA Reference Method 22.

[County Rule 310 §303.1]

**D. EXEMPTIONS FROM DUST-GENERATING OPERATION OPACITY LIMITATION REQUIREMENT:**

- 1) Wind Event: Exceedances of the opacity limit described in Condition C.1) and C.2) of this Section that occur due to a wind event shall constitute a violation of the opacity limit. However, it shall be an affirmative defense in an enforcement action if the owner and/or operator demonstrates all of the following conditions:
  - a) All control measures required were followed and one or more of the following control measures were applied and maintained:
    - (1) For dust-generating operations:
      - i. Cease dust-generating operations for the duration of the condition/situation/event when the 60-minute average wind speed is greater than 25 miles per hour and if dust-generating operations are ceased for the remainder of the work day, stabilize the area;
      - ii. Apply water or other suitable dust suppressant at least twice per hour to dust-generating operations in the PM10 nonattainment area and at least once per hour to dust-generating operations outside the PM10 nonattainment area;
      - iii. Apply water as necessary to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or other equivalent method as approved by the Control Officer and the Administrator. For areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-02e1 or other equivalent method approved by the Control Officer and the Administrator, maintain at least 70% of the optimum soil moisture content; or
      - iv. Implement Condition D.1)a)(1)(ii) or Condition D.1)a)(1)(iii) of this Section and construct fences or three-foot to five-foot high wind barriers with 50% or less porosity adjacent to roadways or urban areas to reduce the amount of wind-blown material leaving a site.
    - (2) For temporary disturbed surface areas, including but not limited to, after work hours, weekends, and holidays:
      - i. Uniformly apply and maintain surface gravel or dust suppressants;

- ii. Apply water to all disturbed surface areas three times per day. If there is any evidence of wind-blown dust, increase watering frequency to a minimum of four times per day;
  - iii. Apply water on open storage piles at least twice per hour to temporary disturbed surface areas in the PM10 nonattainment area and at least once per hour to temporary disturbed surface areas outside the PM10 nonattainment area; or
  - iv. Cover open storage piles with tarps, plastic, or other material such that wind will not remove the covering(s).
- b) Exceedances of the opacity limit described in Condition C of this Section could not have been prevented by better application, implementation, operation, or maintenance of control measures;
  - c) The owner and/or operator compiled and retained records, in accordance with Condition M of this Permit; and
  - d) The occurrence of a wind event on the day(s) in question is documented by records. The occurrence of a wind event must be determined by the nearest Maricopa County Air Quality Department monitoring station, from any other certified meteorological station, or by a wind instrument that is calibrated according to manufacturer's standards and that is located at the site being checked.
- 2) Emergency Maintenance of Flood Control Channels and Water Retention Basins: The opacity limit described in Condition C of this Section shall not apply to emergency maintenance of flood control channels and water retention basins, provided that control measures are implemented.
  - 3) Vehicle Test and Development Facilities and Operations: The opacity limit described in Condition C.1) of this Section shall not apply to vehicle test and development facilities and operations when dust is required to test and validate design integrity, product quality, and/or commercial acceptance, if such testing is not feasible within enclosed facilities. However, all areas used to test and validate design integrity, product quality, and/or commercial acceptance shall be stabilized after such testing, in compliance with Appendix C (Fugitive Dust Test Methods) of MCAQD rules. All areas not used to test and validate design integrity, product quality, and/or commercial acceptance shall be stabilized, in compliance with Appendix C (Fugitive Dust Test Methods) of MCAQD rules.
  - 4) Activities Near the Property Line: The opacity limit described in Condition C.2) of this Section shall not apply to dust-generating operations conducted within 25 feet of the property line.

[County Rule 310 §303.2]

**E. STABILIZATION REQUIREMENTS FOR DUST-GENERATING OPERATIONS:**

**1) Unpaved Parking Lot:**

The owner and/or operator of any unpaved parking lot shall not allow visible fugitive dust emissions to exceed 20% opacity and will meet one of the following requirements:

- a) Shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup>, or
- b) Shall not allow the silt content to exceed 8%.

[County Rule 310 §304.1]

**2) Unpaved Haul/Access Road:**

- a) The owner and/or operator of any unpaved haul/access road (whether including at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall not allow visible fugitive dust emissions to exceed 20% opacity and will meet one of the following requirements:

- (1) Shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup>; or

(2) Shall not allow the silt content to exceed 6%.

- b) The owner and/or operator of any unpaved haul/access road (including at a work site that is under construction or a work site that is temporarily or permanently inactive) shall, as an alternative to meeting the stabilization requirements for an unpaved haul/access road in Section E.2)a) of this Condition, limit vehicle trips to no more than 20 per day per road and limit vehicle speeds to no more than 15 miles per hour. If complying with this section of this Permit, the owner and/or operator must include, in a Dust Control Plan, the maximum number of vehicle trips on the unpaved haul/access roads each day (including number of employee vehicles, earthmoving equipment, haul trucks, and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 miles per hour.

[County Rule 310 §304.2]

3) Disturbed Surface Area:

The owner and/or operator of any disturbed surface area on which no activity is occurring (including at a work site that is under construction or a work site that is temporarily or permanently inactive) shall meet at least one of the standards described below, as applicable. Should any disturbed surface area on which no activity is occurring contain more than one type of visibly distinguishable stabilization characteristics, soil, vegetation, or other characteristics, which are visibly distinguishable, the owner and/or operator shall test each representative surface separately for stability, in an area that represents a random portion of the overall disturbed conditions of the site, in accordance with the appropriate test methods described in Rule 310 Section 501 and in Appendix C (Fugitive Dust Test Methods) of Maricopa County Air Quality Department Rules. The owner and/or operator of such disturbed surface area on which no activity is occurring shall be considered in violation of this rule if the area is not maintained in a manner that meets at least one of the standards listed below, as applicable.

- a) Maintain a soil crust;
- b) Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 cm/second or higher;
- c) Maintain a flat vegetative cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%;
- d) Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%;
- e) Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements;
- f) Maintain a percent cover that is equal to or greater than 10% for non-erodible elements; or
- g) Comply with a standard of an alternative test method, upon obtaining the written approval from the Control Officer and the Administrator.

[County Rule 310 §304.3]

4) Vehicle Test and Development Facilities and Operations:

No stabilization requirement shall apply to vehicle test and development facilities and operations when dust is required to test and validate design integrity, product quality, and/or commercial acceptance, if such testing is not feasible within enclosed facilities. However, all areas used to test and validate design integrity, product quality, and/or commercial acceptance shall be stabilized after such testing, in compliance with Appendix C (Fugitive Dust Test Methods) of these rules. All areas not used to test and validate design integrity, product quality, and/or commercial acceptance shall be stabilized, in compliance with Appendix C (Fugitive Dust Test Methods) of these rules.

**F. CONTROL MEASURES FOR DUST-GENERATING OPERATIONS:**

When engaged in a dust-generating operation, the owner and/or operator shall install, maintain, and use control measures, as applicable. The owner and/or operator of a dust-generating operation shall implement control measures before, after, and while conducting dust-generating operations, including during weekends, after work hours, and on holidays. At least one primary control measure and one contingency control measure must be identified in the Dust Control Plan for all dust-generating sources. Control measures for specific dust-generating operations are described in this Section.

**1) Off-Site Hauling Onto Paved Areas Accessible to the Public:**

The owner and/or operator of a dust-generating operation that involves off-site hauling shall implement the following control measures:

**a) When cargo compartment is loaded:**

- (1) Load all haul trucks such that the freeboard is not less than three inches;
- (2) Load all haul trucks such that at no time shall the highest point of the bulk material be higher than the sides, front, and back of a cargo container area;
- (3) Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate(s); and
- (4) Cover cargo compartment with a tarp or other suitable closure.

**b) When cargo compartment is empty:**

- (1) Clean the interior of the cargo compartment; or
- (2) Cover the cargo compartment with a tarp or other suitable closure.

**c) When off-site hauling, install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse the site.**

[County Rule 310 §305.1]

**2) Bulk Material Hauling/Transporting When On-Site Hauling/Transporting Within the Boundaries of the Work Site but not Crossing a Paved Area Accessible to the Public:**

The owner and/or operator of a dust-generating operation that involves bulk material hauling/transporting when on-site hauling/transporting within the boundaries of the work site but not crossing a paved area accessible to the public shall implement one of the following control measures:

- a) Limit vehicle speed to 15 miles per hour or less while traveling on the work site;
- b) Apply water to the top of the load; or
- c) Cover haul trucks with a tarp or other suitable closure.

[County Rule 310 §305.2]

**3) Bulk Material Hauling/Transporting When On-Site Hauling/Transporting Within the Boundaries of the Work Site and Crossing and/or Accessing a Paved Area Accessible to the Public:**

The owner and/or operator of a dust-generating operation that involves bulk material hauling/transporting when on-site hauling/transporting within the boundaries of the work site and crossing and/or accessing a paved area accessible to the public shall implement all of the following control measures:

- a) Load all haul trucks such that the freeboard is not less than three inches;
- b) Load all haul trucks such that at no time shall the highest point of the bulk material be higher than the sides, front, and back of a cargo container area;
- c) Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate(s); and
- d) When crossing and/or accessing a paved area accessible to the public, install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse the site.

[County Rule 310 §305.3]

- 4) Bulk Material Stacking, Loading, and Unloading Operations: The owner and/or operator of a dust-generating operation that involves bulk material stacking, loading, and unloading operations shall implement at least one of the following control measures:

- a) Spray material with water, as necessary, prior to stacking, loading, and unloading and/or while stacking, loading, and unloading; or
- b) Spray material with a dust suppressant other than water, as necessary, prior to stacking, loading, and unloading and/or while stacking, loading, and unloading.

[County Rule 310 §305.4]

- 5) Open Storage Piles: The owner and/or operator of a dust-generating operation that involves an open storage pile shall implement the following control measures, as applicable:

- a) Prior to and/or while conducting stacking, loading, and unloading operations, implement one of the following control measures:
  - (1) Spray material with water, as necessary; or
  - (2) Spray material with a dust suppressant other than water, as necessary.
- b) When not conducting stacking, loading, and unloading operations, implement one of the following control measures:
  - (1) Cover all open storage piles with a tarp, plastic, or other material to prevent wind from removing the covering(s)/such that the covering(s) will not be dislodged by wind; or
  - (2) Apply water to maintain soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or other equivalent methods approved by the Control Officer and the Administrator. For areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-02e1 or other equivalent methods approved by the Control Officer and the Administrator, maintain at least 70% of the optimum soil moisture content.
  - (3) Maintain a soil crust; or
  - (4) Implement the control measure described in Condition F.5)b)(2) or in Condition F.5)b)(3) of this Section and construct and maintain wind barriers, storage silos, or a three-sided enclosure with walls, whose length is no less than equal to the length of the pile, whose distance from the pile is

no more than twice the height of the pile, whose height is equal to the pile height, and whose porosity is no more than 50%.

[County Rule 310 §305.5]

- 6) Unpaved Staging Areas, Unpaved Parking Areas, and Unpaved Material Storage Areas: The owner and/or operator of a dust-generating operation that involves unpaved staging areas, unpaved parking areas, and unpaved material storage areas shall implement one or more of the following control measures:

- a) Apply water so that the surface is visibly moist;
- b) Pave;
- c) Apply and maintain gravel, recycled asphalt, or other suitable material;
- d) Apply and maintain a suitable dust suppressant other than water; or
- e) Limit vehicle trips to no more than 20 per day per road and limit vehicle speeds to no more than 15 miles per hour. If complying with this section, the owner and/or operator shall provide to the Control Officer the maximum number of vehicle trips on the staging areas, parking areas, and/or material storage areas each day (including number of employee vehicles, earthmoving equipment, haul trucks, and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 miles per hour.

[County Rule 310 §305.6]

- 7) Unpaved Haul/Access Roads: The owner and/or operator of a dust-generating operation that involves unpaved haul/access roads shall implement one or more of the following control measures:

- a) Apply water so that the surface is visibly moist;
- b) Pave;
- c) Apply and maintain gravel, recycled asphalt, or other suitable material;
- d) Apply and maintain a suitable dust suppressant other than water; or
- e) Limit vehicle trips to no more than 20 per day per road and limit vehicle speeds to no more than 15 miles per hour. If complying with this section of this rule, the owner and/or operator shall provide to the Control Officer the maximum number of vehicle trips on the unpaved haul/access roads each day (including number of employee vehicles, earthmoving equipment, haul trucks, and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 miles per hour.

[County Rule 310 §305.7]

- 8) Weed Abatement by Discing or Blading:

The owner and/or operator of a dust-generating operation that involves weed abatement by discing or blading shall comply with all of the following control measures:

- a) Before weed abatement by discing or blading occurs, apply water;
- b) While weed abatement by discing or blading is occurring, apply water; and
- c) After weed abatement by discing or blading occurs, pave, apply gravel, apply water, apply a suitable dust suppressant other than water, or establish vegetative ground cover.

[County Rule 310 §305.8]

- 9) Blasting Operations: The owner and/or operator of a dust-generating operation that involves blasting operations shall implement all of the following control measures:

- a) In wind gusts above 25 miles per hour, discontinue/cease blasting; and
- b) Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.

[County Rule 310 §305.9]

- 10) Demolition Activities: The owner and/or operator of a dust-generating operation that involves demolition activities shall implement all of the following control measures:

- a) Apply water to demolition debris immediately following demolition activity; and
- b) Apply water to all disturbed soils surfaces to establish a crust and to prevent wind erosion.

[County Rule 310 §305.10]

- 11) Disturbed Surface Areas:

The owner and/or operator of a dust-generating operation that involves disturbed surface areas shall implement the following control measures, as applicable:

- a) Before disturbed surface areas are created, implement one of the following control measures:
  - (1) Pre-water site to depth of cuts, allowing time for penetration; or
  - (2) Phase work to reduce the amount of disturbed surface areas at any one time.
- b) While disturbed surface areas are being created, implement one of the following control measures:
  - (1) Apply water or other suitable dust suppressant other than water, as necessary;
  - (2) Apply water as necessary to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or other equivalent method as approved by the Control Officer and the Administrator. For areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-02e1 or other equivalent method approved by the Control Officer and the Administrator, maintain at least 70% of the optimum soil moisture content; or
  - (3) Implement one of the control measures below and construct fences or three-foot to five-foot high wind barriers with 50% or less porosity adjacent to roadways or urban areas to reduce the amount of windblown material leaving a site.
    - i. Apply water or other suitable dust suppressant other than water, as necessary; or
    - ii. Apply water as necessary to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or other equivalent method as approved by the Control Officer and the Administrator. For areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-02e1 or other equivalent method approved by the Control Officer and the Administrator, maintain at least 70% of the optimum soil moisture content.
- c) When the dust-generating operation is finished for a period of 30 days or longer – for longer than temporary pauses that occur during a dust-generating operation, the owner and/or operator shall implement one or more of the following control measures within ten days following the completion of such dust-generating operation:
  - (1) Pave, apply gravel, or apply a suitable dust suppressant other than water;
  - (2) Establish vegetative ground cover in sufficient quantity;

- (3) Implement one of the control measures below and restrict vehicle access to the area;
  - i. Pave, apply gravel, or apply a suitable dust suppressant other than water; or
  - ii. Establish vegetative ground cover in sufficient quantity.
- (4) Apply water and prevent access by fences, ditches, vegetation, berms, or other suitable barrier or means sufficient to prevent trespass as approved by the Control Officer; or
- (5) Restore area such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby undisturbed native conditions.

[County Rule 310 §305.11]

12) Easements, Rights-of-Way, and Access Roads for Utilities (Transmission of Electricity, Natural Gas, Oil, Water, and Gas) Associated With Sources That Have a Non-Title V Permit, a Title V Permit, and/or a General Permit Under These Rules:

The owner and/or operator of a dust-generating operation that involves an easement, right-of-way, and access road for utilities (transmission of electricity, natural gas, oil, water, and gas) associated with sources that have a General permit shall implement at least one of the following control measures:

- a) Inside Area A, limit vehicle speed to 15 miles per hour or less and vehicle trips to no more than 20 per day per road;
- b) Outside Area A, limit vehicle trips to no more than 20 per day per road; or
- c) Implement control measures described in Condition F.7) of this Section.

[County Rule 310 §305.12]

**G. TRACKOUT, CARRY-OUT, SPILLAGE, AND/OR EROSION:**

The owner and/or operator of a dust-generating operation shall prevent and control trackout, carry-out, spillage, and/or erosion.

- 1) Trackout Control Device:
  - a) Criterion for Trackout Control Device: Install, maintain and use a suitable trackout control device that prevents and controls trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse the site at all exits onto paved areas accessible to the public from both of the following:
    - (1) All work sites with a disturbed surface area of two acres or larger, and
    - (2) All work sites where 100 cubic yards of bulk materials are hauled on-site and/or off-site per day.
  - b) Control Measures: For those work sites identified in Condition G.1)a) of this Section, prevent trackout, carry-out, spillage, and/or erosion by implementing one of the following control measures:
    - (1) At all exits onto paved areas accessible to the public, install a wheel wash system;
    - (2) At all exits onto paved areas accessible to the public, install a gravel pad which meets the definition in this Permit;
    - (3) At all exits onto paved areas accessible to the public, install a grizzly or rumble grate that consists of raised dividers (rails, pipes, or grates) a minimum of three inches tall, six inches apart, and 20 feet long, to allow a vibration to be produced such that dust is shaken off the wheels of a vehicle

as the entire circumference of each wheel of the vehicle passes over the grizzly or rumble grate;  
or

- (4) Pave starting from the point of intersection with a paved area accessible to the public and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.

[County Rule 310 §306.1]

2) Clean Up of Trackout:

- a) Criterion for Clean Up of Trackout: Clean up, trackout, carry-out, spillage, and/or erosion from paved areas accessible to the public including curbs, gutters, and sidewalks, on the following time-schedule:

- (1) Immediately, when trackout, carry-out, or spillage extends a cumulative distance of 25 linear feet or more; and
- (2) At the end of the workday, for all other trackout, carry-out, spillage, and/or erosion.

- b) Control Measures:

- (1) Operate a street sweeper or wet broom with sufficient water, including but not limited to kick broom, steel bristle broom, Teflon broom, vacuum, at the speed recommended by the manufacturer and at the frequency(ies) described in this section of this rule; or
- (2) Manually sweep up deposits to comply with this section of this rule.

[County Rule 310 §306.2]

**H. SOIL MOISTURE:**

If water is the chosen control measure in an approved Dust Control Plan, the owner and/or operator of a dust-generating operation shall operate a water application system on-site (e.g., water truck, water hose) while conducting any earthmoving operations on disturbed surface areas 1 acre or larger, unless a soil crust is maintained or the soil is sufficiently damp to prevent loose grains of soil from becoming dislodged.

[County Rule 310 §307]

**I. DUST CONTROL TRAINING CLASSES FOR DUST-GENERATING OPERATIONS:**

1) Basic Dust Control Training Class:

- a) At least once every three years, the site superintendent or other designated on-site representative of the permit holder, if present at a site that has more than one acre of disturbed surface area shall successfully complete a Basic Dust Control Training Class conducted or approved by the Control Officer.
- b) At least once every three years, water truck and water-pull drivers shall successfully complete a Basic Dust Control Training Class conducted or approved by the Control Officer.
- c) All persons having successfully completed training during the 2006 and 2007 calendar years shall be deemed to have satisfied the requirement to successfully complete the Basic Dust Control Training Class, if the training that was completed was conducted or approved by the Control Officer. Completion of the Comprehensive Dust Control Training Class, as required in Condition I.2) of this Section, shall satisfy the requirement of this Condition.

[County Rule 310 §309.1]

2) Comprehensive Dust Control Training Class:

- a) At least once every three years, the Dust Control Coordinator, who meets the requirements of Condition J of this Section, shall successfully complete the Comprehensive Dust Control Training Class conducted or approved by the Control Officer.

- b) All persons having successfully completed training during the 2006 and 2007 calendar years shall be deemed to have satisfied the requirement to successfully complete the Comprehensive Dust Control Training Class, if the training that was completed was conducted or approved by the Control Officer.  
[County Rule 310 §309.2]

**J. DUST CONTROL COORDINATOR FOR DUST-GENERATING OPERATIONS:**

- 1) The Permittee for any site of five acres or more of disturbed surface area subject to a permit issued by the Control Officer requiring control of PM<sub>10</sub> emissions from dust-generating operations shall have on-site at least one Dust Control Coordinator trained in accordance with Condition I.2) of this Section at all times during primary dust-generating operations related to the purposes for which the Dust Control permit was obtained.
- 2) The Dust Control Coordinator shall have full authority to ensure that dust control measures are implemented on-site, including conducting inspections, deployment of dust suppression resources, and modifications or shut-down of activities as needed to control dust.
- 3) The Dust Control Coordinator shall be responsible for managing dust prevention and dust control on the site.
- 4) At least once every three years, the Dust Control Coordinator shall successfully complete a Comprehensive Dust Control Training Class conducted or approved by the Control Officer.
- 5) The Dust Control Coordinator shall have a valid dust training certification identification card readily accessible on-site while acting as a Dust Control Coordinator.
- 6) The requirement for a Dust Control Coordinator shall lapse when all of the following actions/events/procedures occur:
  - a) The area of disturbed surface area becomes less than five acres;
  - b) The previously disturbed surface areas have been stabilized in accordance with/in compliance with the standards and/or requirements of this rule; and
  - c) The Dust Control permit holder provides notice to the Control Officer of acreage stabilization.

[County Rule 310 §310]

**K. DUST CONTROL PLAN:**

The owner and/or operator of a dust-generating operation shall submit to the Control Officer a Dust Control Plan with any permit applications that involve dust-generating operations with a disturbed surface area that equals or exceeds 0.10 acre (4,356 square feet) including both of the following situations:

- 1) When submitting an application for a Dust Control permit involving dust-generating operations that would equal or exceed 0.10 acre (4,356 square feet), and
- 2) Before commencing any routine dust-generating operation at a site that has obtained or must obtain a General permit.

[County Rule 310 §402.1]

**L. DUST CONTROL PLAN CONTENTS:**

The Plan shall contain, at a minimum, the following information:

- 1) Name(s), address(es), and phone numbers of person(s) responsible for the submittal and implementation of the Dust Control Plan and responsible for the dust-generating operation.
- 2) A drawing, on 8½" x 11" paper, that shows:
  - a) Entire project site/facility boundaries,

- b) Acres to be disturbed with linear dimensions,
  - c) Nearest public roads,
  - d) North arrow, and
  - e) Planned exit locations onto paved areas accessible to the public.
- 3) Appropriate control measures, or a combination thereof, as described in Condition F and Condition G of this Section, for every actual and potential dust-generating operation.
- a) Control measures must be implemented before, after, and while conducting any dust-generating operation, including during weekends, after work hours, and on holidays.
  - b) All required control measures and at least one contingency control measure must be identified for all dust-generating operations.
  - c) A control measure that is not listed in Condition F and Condition G of this Section may be chosen provided that such control measure is implemented to comply with the requirements described this Permit.
- 4) Dust suppressants to be applied, including all of the following product specifications or label instructions for approved usage:
- a) Method, frequency, and intensity of application;
  - b) Type, number, and capacity of application equipment; and
  - c) Information on environmental impacts and approvals or certifications related to appropriate and safe use for ground application.
- 5) Specific surface treatment(s) and/or control measures utilized to control material trackout and sedimentation where unpaved roads and/or access points join paved areas accessible to the public.
- 6) The Dust Control Plan shall be kept onsite and readily available upon inspections.
- 7) If the Control Officer determines that an approved Dust Control Plan has been followed, yet fugitive dust emissions from any dust-generating operation still exceed the standards of this rule, then the Control Officer shall issue a written notice to the owner and/or operator of the dust-generating operation explaining such determination. The owner and/or operator of a dust-generating operation shall make written revisions to the Dust Control Plan and shall submit such revised Dust Control Plan to the Control Officer within three working days of receipt of the Control Officer's written notice, unless such time period is extended by the Control Officer, upon request, for good cause. During the time that such owner and/or operator is preparing revisions to the approved Dust Control Plan, such owner and/or operator must still comply with all requirements of this Permit. If the Control Officer determines that an approved Dust Control Plan has been followed yet fugitive dust visible emissions from any given fugitive dust source under the control of the Permittee still exceeds opacity limitations, then the Permittee shall make written revisions to the Dust Control Plan effectively correcting the deficiencies identified by the Control Officer. The Permittee shall submit these revisions to the Control Officer within three working days of being notified in writing of the Control Plan's deficiencies per Rule 310, §305. During the time the Permittee is revising the Plan, the Permittee shall still comply with all requirements in Rule 310.

[County Rule 310 §§402, 403 and 503]

**M. RECORD KEEPING:**

Any person who conducts dust-generating operations that require a Dust Control Plan shall retain copies of approved Dust Control Plans, control measures implementation records, and all supporting documentation for at

least six months following the termination of the dust-generating operation and for at least two years from the date such records were initiated.

- 1) Any person who conducts dust-generating operations that require a Dust Control Plan shall keep a written record of self-inspection on each day dust-generating operations are conducted. Self-inspection records shall include daily inspections for crusted or damp soil, trackout conditions and clean-up measures, daily water usage, and dust suppressant application. Such written record shall also include the following information:
  - a) Method, frequency, and intensity of application or implementation of the control measures;
  - b) Method, frequency, and amount of water application to the site;
  - c) Street sweeping frequency;
  - d) Types of surface treatments applied to and maintenance of trackout control devices, gravel pads, fences, wind barriers, and tarps;
  - e) Types and results of test methods conducted;
  - f) If contingency control measures are implemented, actual application or implementation of contingency control measures and why contingency control measures were implemented;
  - g) List of subcontractors' names and registration numbers updated when changes are made; and
  - h) Names of employee(s) who successfully completed dust control training class(es) required by Condition I of this Section, date of the class(es) that such employee(s) successfully completed, and name of the agency/representative who conducted such class(es).
- 2) Any person who conducts dust-generating operations that do not require a Dust Control Plan shall compile and retain records (including records on any street sweeping, water applications, and maintenance of trackout control devices, gravel pads, fences, wind barriers, and tarps) that provide evidence of control measure application, by indicating the type of treatment or control measure, extent of coverage, and date applied.
- 3) Upon verbal or written request by the Control Officer, the log or the records and supporting documentation shall be provided as soon as possible but no later than 48 hours, excluding weekends. If the Control Officer is at the site where requested records are kept, records shall be provided without delay.

[County Rule 220 §500] [County Rule 310 §§502 and 503]